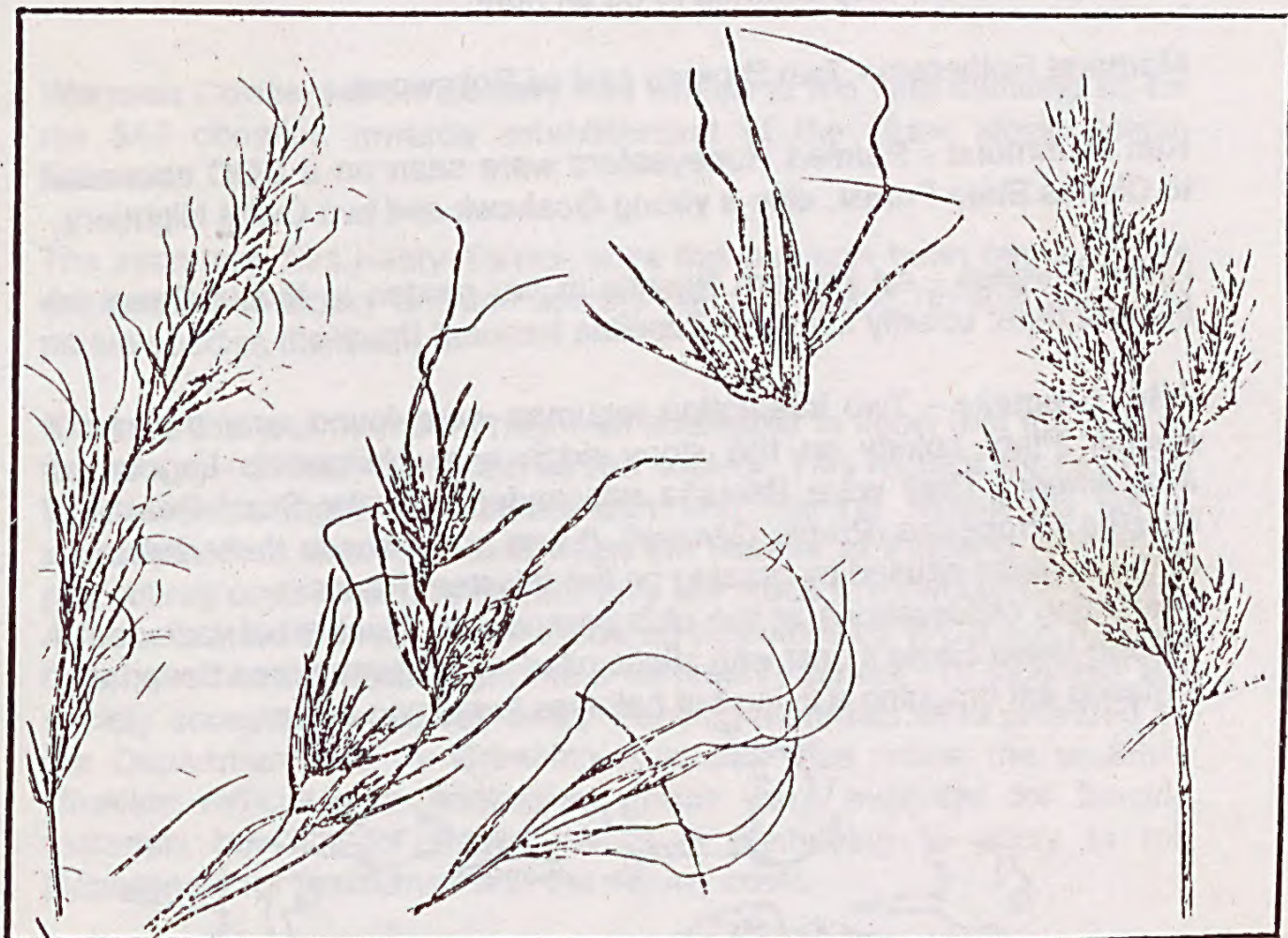


Field Naturalists
Club of Ballarat
Incorporated

Meeting	Mar 3	Annual General Meeting and Members' Night
Meeting	Feb 5	Wombat Forest - Pat Murphy (note change of venue)
Excursion	Mar 5	Brolga excursion to Willaura - G Binns, M Rotheram and G Cerini
Excursion	Feb 3	<i>Mooramong</i> Grassland Project - Neville Scarlett



Meetings as specified are held at the School of Mines and Industries, Lydiard Street Sth, Art Building, commencing at 7.30 p.m. EXCURSIONS, AS SPECIFIED, COMMENCE FROM BOOK CITY, cnr STURT AND ARMSTRONG STS, BALLARAT at 9.30 a.m. for FULL DAY OUTING: OR at 1.30 p.m. for HALF DAY.

Field Notes

Alan Morrison - More than 300 Chestnut Teal at Swan Bay

Greg Binns - The Peregrine Falcons which have nested at Dereel for many years failed to arrive this year. At Devil's Kitchen, three young had been raised. These had been banded by a team from the Department of Conservation and Natural Resources, who said they had banded at about 80 sites.

Bill and Pat Murphy - Checked the nest three days later and found all three young fully fledged and close to the nest.

Alan Morrison - The CNR team had also banded the young Peregrines at Langhi Ghiran; they seemed to be all right.

Margaret Rotheram - Two Brolgas east of Rokewood.

Ken Hammond - Painted Honeyeaters were seen on a BOC excursion to Clunes State Forest, also a young Goshawk and two Owlet Nightjars.

Helen Burgess - An Eastern Rosella in her garden in Moola Street for the first time: usually Crimson Rosellas frequent the area.

John Gregurke - Two interesting legumes were found near the club's Anchor Plant colony on the stony ridge near Horseshoe Lagoon at Mooramong. They were *Psoralia adscendens* (Dusky Scurf Pea) and *Glycine latrobeana* (Purple Glycine). It was good to see these because of the ravages caused by grazing on the Western Plains.

Interesting observations at the club campout at Muckleford included a Wedge-tailed Eagle's nest with sticks piled about two metres deep; also a mason ant dragging a living but helpless huntsman spider.



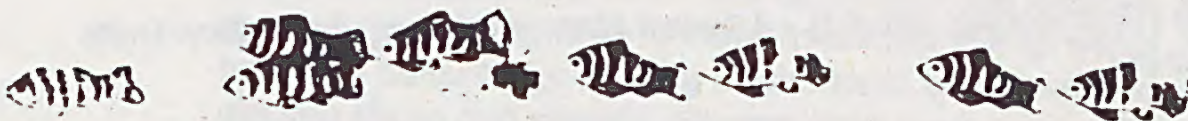
Diary Dates

Friday March 3 AGM and Members' Night - Annual Election of Office Bearers - all positions will be declared vacant. Nomination forms will be available at the February meeting. Also at this meeting members are invited to bring 10 or 12 slides of general interest.

Sunday March 5 Excursion to Willaura district, and possibly other wetlands, to spot Brolgas - bring telescopes (if available) as well as binoculars.

March 10 - 13 WVFNCA/VFNCA Campout at Nelson. Full payment for bookings requested by Portland Field Naturalists Club by February 12.

Tuesday Feb 21 Committee Meeting at John and Elaine Gregurke's,



Wannon Conservation Society has written to the club thanking us for the \$40 donation towards establishment of the Giant Rock Scenic Reserve.

The secretary, Mrs Hilary Turner, says this has now been fenced on its designated boundary and the society plans to begin revegetation with native species this year.

She said that our members might be interested to know that the cost of the survey - \$1500 - was paid by the society. This request for payment by the Department of Conservation and Natural Resources set a precedent. The situation arose when the Ranger at Portland refused to pay survey costs and insisted that only the Rock itself would be fenced. A fence around the rock was considered ridiculous by WCS and it would then have been difficult to get the 6 ha reserve fenced. To stop this, the society accepted the survey costs. Fencing materials were provided by the Department and by Greening Australia. This made the society's situation difficult, she added, as grants were available for fencing materials but not for wages. WCS is continuing to apply to the Department for assistance with the survey costs.

Giant Rock Reserve is about 11 km north of Coleraine and Wannon members hope that our club members will visit the reserve.

MR



THE WAITE ARBORETUM - Aboriginal Plant Trail

Staff at the Arboretum in Adelaide (see our June newsletter) have made a special study of plants used by the Aborigines. Various trees and shrubs are signposted and information is displayed concerning the special uses made by the Aborigines.

These include:

Native grape (*Cissus hypoglauca*) - a scrambling vine found in northern and eastern Australia. Fruits are edible but astringent and were used to cure sore throats. Sometimes the tubers were roasted on hot stones and eaten.

Desert lime (*Eremocritus glauca*) - a desert plant producing tiny yellow fruits rich in vitamin C.

Bottle tree (*Brachychiton rupestris*) - the tree contains a sweet edible jelly-like substance, as well as abundant water between the wood and inner bark. The inner bark, and bark from the roots was used as a source of fibre for nets and ropes. The women wore their teeth to the gums in chewing the fibre to prepare twine. The seeds were eaten raw or roasted or pounded into a flour. The boiled tuberous roots also provided food and were said to taste rather like turnip.

Prickly paperbark (*Melaleuca stypheliodes*) - the Aborigines had many uses for melaleucas. The small, short branches were stripped of leaves and their ends chewed to make brushes for body painting. The nectar-filled flowers were soaked in water to sweeten it. The bark was rolled very tightly and used as a torch. The oils in the bark kept the torch smouldering and the smoke acted as a mosquito repellent. The bark was also used to make head dresses, knife sheaths and serve as a blanket. The young leaves were bruised and soaked in water, with the liquid produced used to treat cold and headaches.

Weeping emubush (*Eremophila longifolia*) - over 200 species of *Eremophila* have been recognised. Because they are widespread many Aboriginal tribes have used them, primarily for their medicinal properties, as well as for cultural rites. Of these, *Eremophila longifolia* was one of the most utilised and played an important role during the early life of the infants. Some days after birth, mother and child would sit in a trench in which green twigs of emubush were burnt - the fumes were inhaled and were considered to strengthen the baby, stop the mother's bleeding and increase her milk supply. The leaves, twigs and bark were also used as a decoction to cure headaches, insomnia and colds and an infusion of leaves was applied to sore eyes, boils and used as a counter-irritant.

Emu apple (*Owenia acidula*) - the purplish-red round fruits have dark, rich and tangy pulp resembling a plum in flavour but only palatable after falling. Major Mitchell was among the first Europeans to taste the fruits which he found agreeable. The fruits are enjoyed by emus which swallow them whole and disperse the seeds - it is thought the seeds probably need to pass through the emu's gut before they can germinate.

Sheoaks (*Casuarina* and *Allocasuarina* species) - the Aborigines soaked the cones of casuarinas in their drinking water to give it a lemon flavour. At times when water was scarce, they chewed the needle-like stems which made their saliva flow more and decreased the need for water. Some species develop hollows in their trunks which trap water. Sheoak wood is hard and suitable for making implements like spears, spear throwers, clubs, digging sticks and shields. Boomerangs were carved from the roots, using the natural bends to advantage.

River red gum (*Eucalyptus camaldulensis*) - the gum, or kino was dissolved in water to make a drink which was used as a treatment for diarrhoea. The oil from the leaves was also used for medicinal purposes as a decongestant, expectorant and counter irritant.

Several other plants are included on their 'plant trail' and a walk around to find them is most rewarding - and quite appetising.

VD

The Masked Owl, rare in Victoria.



Three significant **botanical discoveries** were announced during the summer holidays. Lyndsay Fink has collected news reports on them.

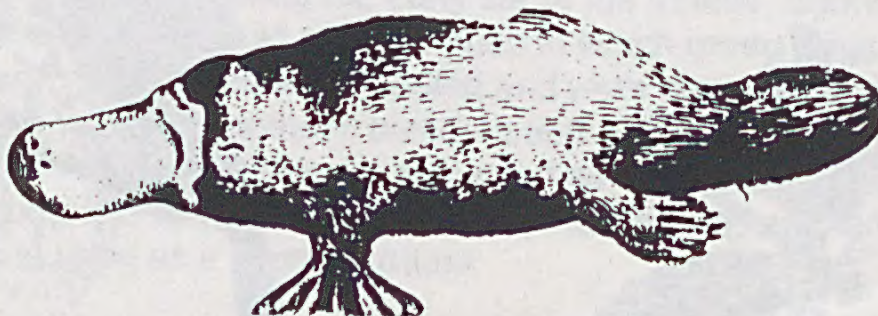
In the Wollemi National Park (200 km north of Sydney), an ancient species of pine tree was discovered. Described as a relic from the age of dinosaurs, the "Wollemi Pine" is thought to be not just a new species of conifer but a previously unknown genus. Botanists say it belongs to an ancient conifer family, the *Araucarians*, which evolved in Gondwana during the Jurassic period, 180 million years ago.

An ancient species of eucalypt, thought to be thousands of years old, has been found in the Banyabba Nature Reserve, north of Grafton, NSW. It is thought to be either a sub-species of *Eucalyptus pachycalyx* or a new species.

Of special interest to Ballarat is recent research into the discovery of an ancient type of silky oak in the rainforest on Mt Bartle Frere (Queensland's highest mountain) near Cairns. A CSIRO scientist found nutlike fruits from the tree in 1961 but could not locate the source. Twenty years later another scientist tracked them to a tree resembling a macadamia but of a new genus. From its rich rosy wood, it was grouped with the silky oaks, a sub-family of the Proteaceae. Recently, Dr Andrew Douglas, an American botanist with Melbourne's Royal Botanical Gardens, visited the area to collect samples and became very excited at the unique and primitive nature of the plant. He has since found that a cross-section of the fruit is identical to an 1870 lithograph from a book on fossil plants by Ferdinand von Mueller. The 55 million year old fossil was found under basalt between Ballarat and Smythesdale.

Another heartening find in January was the discovery of a small population of Golden Bandicoots on the small island of Marchinbar off the coast of Arnhem Land. This is one of Australia's rarest mammals and has not been sighted in the Northern Territory for 50 years. The only surviving mainland population is in a narrow coastal strip in the Kimberley. The Golden Bandicoot is also found on Barrow Island (off the Pilbara) and Augustus Island (Kimberley coast).

MR



Identifying Thornbills

We all have problems from time to time in identifying those "little brown jobs" - the bird moved too quickly through an area, the density of vegetation was too thick for us to get a good look at the bird, the lighting was bad, or we may not have been experienced enough to identify the species confidently.

How well do you know your thornbills? All thornbills belong to the family *Acanthizidae*, along with the scrubwrens, gerygones (fairy warblers), bristlebirds and whitefaces. The 12 species of thornbills can quite easily be confused with gerygones and scrubwrens, but they tend to be smaller and plumper, and form (usually) small feeding groups.

Most thornbills have distinct geographical ranges, so it is always a good idea to make a list of those you are likely to encounter, before you go out birdwatching. Thornbill species are usually associated with specific habitats (e.g. Yellow-rumped Thornbills can be found in open woodlands and parklands, whereas Striated Thornbills tend to be in dry forest), though identifying them in association with habitat can be unreliable because there are always some individuals who have not read the rule book. Facial and chest markings, rump colours, calls and social behaviour are the most reliable features used to identify thornbills. Fortunately the common names of most highlight the distinguishing features such as with the Chestnut-rumped and the Striated Thornbill.

Acknowledgement: RAOU and GB



Swamp Wallaby *Wallabia bicolor*

Order - Diprotodonta Super Family - Macropodoidea

A combination of genetic, reproductive, dental, and behavioural characteristics set this wallaby apart from all others and it is classed as the sole surviving member of the genus *Wallabia*. While all other wallabies of the genus *Macropus* have 16 chromosomes, the Swamp Wallaby has 11 (in the male) and 10 (in the female). It could be said it is a survivor from the Mega-fauna

It lives in thick undergrowth in forest, woodland and heath in Eastern and Southern Australia, from Cape York to Western Victoria. It is quite rare in South Australia. Sheltering in dense fern and grass, sometimes in damp places on hillsides, it emerges at night to feed. Food plants consist of both shrubs and grass and often it will graze on crops.

Breeding may occur throughout the year (beginning at the age of 15 to 18 months). Females may mate about 7 days before giving birth, producing a single embryo that remains dormant until the pouch is empty. After a gestation period of 33 to 38 days, the single young is born. The Swamp Wallaby differs from most, if not all marsupials in having a gestation period longer than the oestrus cycle.

The young leave the pouch at 8 to 9 months but continue to suckle until about 15 months.

The small body and coarse fur make them unattractive to commercial shooters.

There are 5 sub-species and they are very common around the Ballarat area.

Elfin

This is the last of the truly Australian mammals, or the Gondwana animals. Next - the Bats.

Elfin